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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,997	02/02/2004	Claus Riehle	PO-8010/LeA 36,342	2148
157	7590	12/01/2005	EXAMINER	
BAYER MATERIAL SCIENCE LLC			SUNG, CHRISTINE	
100 BAYER ROAD			ART UNIT	
PITTSBURGH, PA 15205			PAPER NUMBER	
			2884	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/769,997	RIEHLE ET AL.	
	Examiner	Art Unit	
	Christine Sung	2884	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 8,9 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0904.0204</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 recites the limitation "the product of claim 8" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The examiner assumes the claim was intended to depend upon claim 10, a product claim, not claim 8, a process claim.
2. Claims 8-9, and 17-19 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim alternative only--, and/or, --cannot depend from any other multiple dependent claim-- see MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The process steps enumerated in claim 7 are unclear, specifically what steps are taken after each supply.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-6 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald (US Patent 6,072,576 A) in view of Wilson (US Patent 6,561,010 B2).

Regarding claim 1, McDonald discloses a process for monitoring and/or controlling (claim 1, lines 39-41) at least one nitrating process (claim 6) comprising:

Measuring spectrometrically (claim 3) an online composition (column 4, lines 45-51) of a nitration reaction mixture (claim 6),

Relaying data from the spectrometer (claim 3) to a process system in order to control and monitor the production process (column 1, line 49-51)

McDonald does not explicitly state that the composition of acid phase is measured, however, Wilson discloses measuring the amount of acid present using a spectrometer (column 5, line 52- column 6, line 13). One of ordinary skill in the art would be motivated to measure the conventional laboratory parameter such as acid content in order to accurately monitor the reaction process.

Regarding claim 2, McDonald discloses using an IR spectrometer (claim 3).

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Regarding claim 3, McDonald discloses using and NIR spectrometer (claim 4).

Regarding claim 4, McDonald discloses a measuring cell for spectrometric measurement is located in a by pass (Figure 3).

Regarding claims 5-6, McDonald discloses a calibration model for evaluating the data collected (column 8, lines 42-65).

Regarding claim 10, McDonald discloses a product capable of automatically implementing the steps of:

Evaluating data obtained by a spectrometric examination (Figure 3, element 501) of an a nitration process (claim 6) to determine the content or composition (column 4, lines 45-51), and

Relaying the content data to control metering of process reaction (claim 1 and column 8, lines 64-65).

McDonald does not explicitly state that the composition of acid phase is measured, however, Wilson discloses measuring the amount of acid present using a spectrometer (column 5, line 52- column 6, line 13). One of ordinary skill in the art would be motivated to measure the conventional laboratory parameter such as acid content in order to accurately monitor the reaction process.

Regarding claim 11, McDonald discloses a calibration model for evaluating the data collected (column 8, lines 42-65).

Regarding claim 12, Wilson discloses the automation of online monitoring processes (column 12, lines 6-10).

Regarding claim 13, McDonald discloses a facility for monitoring and/or controlling a nitration process (claim 1, lines 39-41) comprising:

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Means for spectrometric examination (claim 3) of a material after process (claim 6);

McDonald does not specify a means for metering the material and further does not explicitly state that the composition of acid phase is measured. Wilson discloses using a regulator (column 7, lines 2-11), which meters the amount of material to be detected. Further, Wilson discloses measuring the amount of acid present using a spectrometer (column 5, line 52-column 6, line 13). One of ordinary skill in the art would be motivated to measure the conventional laboratory parameter such as acid content in order to accurately monitor the reaction process.

Regarding claim 14, McDonald discloses using an IR spectrometer (claim 3).

Regarding claim 15, McDonald discloses using and NIR spectrometer (claim 4).

Regarding claim 16, McDonald discloses a measuring cell for spectrometric measurement is located in a by pass (Figure 3).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Friday 7-3 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CS

Christine Sung  
Examiner  
Art Unit 2884

  
**OTILIA GABOR**  
**PRIMARY EXAMINER**